

Appl. No. 10/036,090
Amdt. Dated February 27, 2004
Reply to Office Action of December 1, 2003

Attorney Docket No. 81868.0038
Customer No. 26021

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Canceled) A rotor for a permanent magnet embedded motor, the rotor comprising:

a rotor core made of magnetic material and having a plurality of slits formed at corresponding poles; and

at least one bond magnet embedded in at least one of the slits, wherein the at least one bond magnet is formed from a plate-shaped bond magnet, wherein a length dimension and a width dimension of the at least one bond magnet in a cross-section orthogonal to an axis of the rotor are both greater than a corresponding dimension of the at least one of the slits, and the at least one bond magnet is fitted in the at least one of the slits under pressure.

2. (Previously Canceled)

3. (Currently Canceled) A rotor according to claim 1, wherein each of the slits has an opening section in one of an arc shape, a V shape and a channel shape.

4. (Currently Canceled) A rotor according to claim 1, wherein at least one of the slits has a partially narrow section in the width dimension thereof.

5. (Currently Canceled) A rotor according to claim 1, wherein the width dimension of the at least one of the slits changes in a length direction thereof.

6. (Currently Canceled) A rotor according to claim 1, wherein each of the slits comprises a plurality of protrusions formed on an inner surface thereof to extend into a corresponding bond magnet fitted in the slit.

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7. (Currently Canceled) A rotor according to claim 1, wherein the at least one bond magnet is flexibly compressive and flexibly contracted in the corresponding slit.

8. (Currently Canceled) A rotor according to claim 1, wherein the at least one bond magnet is flexibly compressive in at least one of a length direction and a width direction thereof and flexibly contracted in the corresponding slit in at least one of the length direction and the width direction.

9. (Currently Canceled) A rotor according to claim 1, wherein at least one of the length dimension and the width dimension of the at least one bond magnet is approximately 5% larger than the corresponding dimension of the at least one of the slits.

10-20. (Previously Canceled)

21 (Previously Amended) A rotor for a permanent magnet embedded motor, the rotor comprising:

a rotor core comprising a plurality of stacked plates of a magnetic material and having a plurality of slits formed at corresponding poles; and

at least one bond magnet embedded in at least one of the slits, wherein the at least one bond magnet is formed from a plate-shaped bond magnet, wherein a length dimension and a width dimension of the at least one bond magnet in a cross-section orthogonal to an axis of the rotor are both greater than a corresponding dimension of the at least one of the slits, and the at least one bond magnet is fitted in the at least one of the slits under pressure, and an outer peripheral face of the at least one bond

magnet is fitted into an entire inner peripheral face of the plurality of stacked plates of the rotor core wherein no space is left between the bond magnet and the stacked plates regardless of an unevenness of the inner peripheral face of the plurality of stacked plates of the rotor core.

22. (Previously Canceled)

23. (Previously Added) A rotor according to claim 21, wherein each of the slits has an opening section in one of an arc shape, a V shape and a channel shape.

24. (Previously Added) A rotor according to claim 21, wherein at least one of the slits has a partially narrow section in the width dimension thereof.

25. (Previously Added) A rotor according to claim 21, wherein the width dimension of the at least one of the slits changes in a length direction thereof.

26. (Previously Added) A rotor according to claim 21, wherein each of the slits comprises a plurality of protrusions formed on an inner surface thereof to extend into a corresponding bond magnet fitted in the slit.

27. (Previously Added) A rotor according to claim 21, wherein the at least one bond magnet is flexibly compressive and flexibly contracted in the corresponding slit.

28. (Previously Added) A rotor according to claim 21, wherein the at least one bond magnet is flexibly compressive in at least one of a length direction and a width direction thereof and flexibly contracted in the corresponding slit in at least one of the length direction and the width direction.

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29. (Previously Added) A rotor according to claim 21, wherein at least one of the length dimension and the width dimension of the at least one bond magnet is approximately 5% larger than the corresponding dimension of the at least one of the slits.